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EXAMINER

CHANKONG, DOHM

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/731,758	Applicant(s) FACCIN ET AL.	
	Examiner DOHM CHANKONG	Art Unit 2452	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2012.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 1, 4-16, 32 and 85-96 is/are pending in the application.
- 5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 1, 4-16, 32, and 85-96 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

This final rejection is in response to Applicant's amendment filed on 1/18/2012.

Applicant amends claims 1, 4-12, 32, 85, and 87-96, cancels claims 97-100, and previously cancelled claims 2, 3, 17-31, and 33-84. Accordingly, Applicant presents claims 1, 4-16, 32, and 85-96 for further examination.

I. RESPONSE TO ARGUMENTS

Applicant's arguments with respect to claims 1, 4-16, 32, and 85-92 have been considered but are moot in view of the new ground(s) of rejection which is necessitated by Applicant's amendment to the independent claims which changes the scope of the claims in a manner that requires further search and consideration.

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II. CLAIM REJECTIONS – 35 U.S.C. § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

A. Claims 1, 6, 9, 13-16, 85, and 87-89 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Pepe* et al., U.S. Patent No. 5,742,668 [*“Pepe”*] in view of *Chow* et al., U.S. Patent No. 6,445,911 [*“Chow”*] in further view of *Salmela* et al., U.S. Patent No. 6,181,938 [*“Salmela”*].

Claims 1, 85, and 87

As to claim 1, *Pepe* as modified by *Chow* and *Salmela* discloses a method of controlling access of a subscriber to a network comprising:

sending, from a visiting network comprising at least one server [*Pepe*, column 2 «lines 16-37»] to a home network during an application level registration of a subscriber [*Pepe*, column 2 «lines 34-37»: disclosing updating the user’s location during roaming registration], an identification of the subscriber [*Pepe*, column 2 «lines 19-37» | column 6 «lines 10-15 and 47-52»: disclosing validating subscriber's request] and a type of access network at which the subscriber is registering [*Salmela*, column 3 «lines 19-34»: disclosing that a terminal transmits a mode update during registration where the mode of the terminal identifies the type of network to which the terminal is registering – for example, GSM mode would identify the network as a GSM PLMN mobile telephone network while DECT mode would identify a private network];

in response to the sending, storing in the visited network a selected subscriber profile [*Pepe*, column 2 «lines 19-37»: disclosing storing the profile in the visiting network] selected

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from a plurality of subscriber profiles for the subscriber [*Chow*, column 7 «line 61» to column 8 «line 21»: disclosing a user may have multiple service profiles based on the services to which the subscriber is subscribed], in which the selected subscriber profile comprises an authorization for an authorized level or type of access [*Chow*, column 8 «lines 5-43»: disclosing that the specific service profile describes the type of service access available to the user]; and

controlling, by the visited network, access of the subscriber to services provided through the visited network dependent upon a comparison of a requested level of access and the authorized level of access in the stored subscriber profile [*Pepe*, column 2 «lines 19-37» | column 6 «lines 11-27» and 47-59» & *Chow*, column 8 «lines 23-42»].

As noted in the foregoing mapping, *Pepe* does not expressly disclose:

1. sending an identification of a type of access network at which the subscriber is registering; and
2. that one subscriber may have multiple profiles in the home network.

However, both features were well known in the art at the time of Applicant's invention as evidenced by *Chow* and *Salmela*.

A. *Salmela* discloses a mobile terminal sending a mode update which identifies the type of access network at which the subscriber is registering.

Salmela discloses a multi-mode user terminal that can access different types of networks [column 2 «lines 9-18»]. *Salmela* discloses that when the user terminal registers itself in a GSM network, the terminal sends a mode update in the form of a location update where the mode update identifies the current mode of the terminal (e.g., GSM). This mode also identifies the network to which the terminal is registering (e.g., a GSM network).

Pepe also discloses sending a location update during a roaming registration process. It would have been obvious to one of ordinary skill in the art to have modified *Pepe*'s location update to include the "mode update" information described above in *Salmela*. Such a modification to *Pepe*'s location update is an example of combining prior art elements according to known methods to yield predictable results. *See* MPEP § 2143.

B. Chow discloses establishing multiple profiles that specify different types of access to services.

Like *Pepe*, *Chow* is directed to an invention for providing access to services to a subscriber in a visited network [*Chow*, column 1 «lines 46-67»]. *Chow* further discloses that a subscriber may establish multiple profiles that specify different types of access to services based on, for example, the user's location [*Chow*, column 8 «lines 23-42»].

It would have been obvious to one of ordinary skill in the art to have modified *Pepe*'s invention to include multiple profiles for a single subscriber as taught in *Chow*. Such a modification would improve *Pepe*'s system because it would allow a subscriber to establish appropriate profiles for different situations that the subscriber is in.

Claims 85 and 87 are rejected for at least the same reasons set forth for claim 1.

Claim 6 and 9

Pepe as modified by *Chow* and *Salmela* discloses the authorized level of access authorizes specific connection supplementary services [*Pepe*, column 7 «lines 15-25» & *Chow*, column 8 «lines 23-43»].

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Claim 13

Pepe as modified by *Chow* and *Salmela* discloses the home network is an internet protocol network and the visited network is a wireless public cellular bearer network [*Pepe*, column 23 «lines 50-60»].

Claim 14

Pepe as modified by *Chow* and *Salmela* discloses the public cellular bearer network is a general packet radio system network [*Pepe*, column 18 «lines 30-40»].

Claim 15

Pepe as modified by *Chow* and *Salmela* discloses the home network is an internet protocol network and the visited network is an internet service provider [*Pepe*, column 2 «lines 58-65» | column 22 «lines 37-41»].

Claim 16

Pepe as modified by *Chow* and *Salmela* discloses the home network is an internet protocol network and the visited network is a wireless local area network [*Pepe*, column 23 «lines 28-38»].

Claims 88 and 89

Pepe as modified by *Chow* and *Salmela* discloses the visited network according to claim 87 and the method according to claim 1, in which the at least one server is further configured to send to the home network the type of access network as an access type indicator [*Salmela*, column 3 «lines 19-34»: where the mode of the terminal identifies the GSM network].

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B. Claims 4 and 7 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Pepe*, *Salmela*, and *Chow* in further view of *Lupien*, U.S. Patent No. 5857153.

Pepe as modified by *Salmela*, *Chow*, and *Lupien* discloses the authorized level of access authorizes a specific degree of bandwidth in communications [*Lupien*, column 14 «lines 25-35»: disclosing incorporating bandwidth information for a subscriber | column 11 «lines 21-40»].

It would have been obvious to one of ordinary skill in the art to have modified *Pepe* and *Chow*'s service profiles to include degree of bandwidth information as described in *Lupien*. Modification of a service profile to include additional information concerning the services provided to a subscriber is not a novel step because such a modification is an example of combining prior art elements (*Chow*'s service profile and *Lupien*'s service profile comprising bandwidth information) according to known methods to yield predictable results. See MPEP § 2143.

C. Claims 5 and 8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Pepe*, *Salmela*, and *Chow* in further view of *Rai et al.*, U.S. Patent No. 6,377,982 [*"Rai"*].

Pepe as modified by *Salmela*, *Chow* and *Rai* discloses the authorized level of access authorizes a specific degree of security in communications [*Rai*, column 24 «lines 13-25»: disclosing each subscriber is defined a security context which authorizes a degree of security (e.g., type of encryption) for communications].

It would have been obvious to one of ordinary skill in the art to have modified *Pepe*'s mobile service provisioning system to include *Rai*'s security contexts. Such a modification would improve *Pepe*'s system by allowing subscriber-specific defined security in communications.

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D. Claims 32 and 33 are rejected under 35 U.S.C § 103(a) as being unpatentable over *Pepe, Salmela, and Chow* in further view of *Hoffman*, U.S Patent No. 6.148.199.

Pepe, Salmela, and Chow do not disclose the claimed features in claims 32 and 33.

However, in the same field of invention, *Hoffman* discloses:

the identification of the subscriber and the requested level or type of access is sent in an application level registration message that is generated by the visited network in response to a request from subscriber equipment [*Hoffman*, column 1 «lines 31-37»];

in response to an entity in the visited network receiving the request, an address of an entity in the home network is obtained from a routing analysis in the visited network [column 1 «lines 37-41»];

the application level registration message is transmitted to the address in the home network [column 1 «lines 37-41»]; and

an entity of the home network obtains the subscriber profile in response to receipt of the application level registration message [column 1 «lines 31-41»].

It would have been obvious to one of ordinary skill in the art to incorporate *Hoffman*'s well known teachings into *Pepe*'s system. One would have been motivated to provide such a combination because such functionality is well known in the art for providing subscriber profiles to visited networks from home networks.

E. Claim 86 is rejected under 35 U.S.C. § 103(a) as being unpatentable over *Pepe, Salmela, and Chow* in further view of *Sofer et al.*, U.S. Patent Publication No. 20020012351 [*“Sofer”*].

Pepe as modified by *Salmela, Chow, and Sofer* discloses the sending means and the storing means and the controlling means comprises at least one server in the visited network

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[*Sofer*, Fig. 1 «item 32», 0015: *Sofer* discloses a visited network comprising a gateway where a gateway is analogous to a server | 0016: disclosing that the visiting gateway has a database for storing | 0018: disclosing that the visiting gateway controls access | 0021: disclosing that the visiting gateway sends messages].

Pepe does not disclose that the sending means, the storing means, and the controlling means comprises at least one server. However, such a feature was well known in the art at the time of Applicant's invention as evidenced by *Sofer*.

In a similar field of invention, *Sofer* is directed to controlling access to services on a home network when visiting another network [abstract]. *Sofer* also discloses a gateway (i.e., server) as part of the visited network that sends messages, stores subscriber information, and controls access to services.

It would have been obvious to one of ordinary skill in the art to have modified *Pepe*'s invention to include *Sofer*'s gateway. Such a modification to include *Sofer*'s gateway into *Pepe* is an example of combining prior art elements (*Sofer*'s gateway and *Pepe*'s system) according to known methods to yield predictable results. See MPEP § 2143.

F. Claims 12, 90-93, and 96 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Bharatia*, U.S. Patent Publication No. 20010031635 in view of *Chow* and *Salmela*.

Claims 90 and 92

As to claim 90, *Bharatia* in view of *Chow* and *Salmela* discloses a method comprising:
in a home network comprising at least one server [*Bharatia*, 0016: disclosing a packet switched wireless network as the subscriber's home network | 0090], storing for a given subscriber a plurality of subscriber profiles [*Chow*, column 7 «line 61» to column 8 «line 21»:

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disclosing a user may have multiple service profiles based on the services to which the subscriber is subscribed], each subscriber profile indicating a different level of access for which the given subscriber is authorized [*Chow*, column 8 «lines 5-43»: disclosing that the specific service profile describes the type of service access available to the user];

in response to the home network receiving from a visited network an application level registration message identifying the given subscriber and a requested type of access network at which the subscriber is registering [*Bharatia*, 0077: disclosing the CSCF (which is located in the home network) processes application level registration requests | 0081, 0083: disclosing receiving information relating to the subscriber and requested services | 0112 & *Salmela*, column 3 «lines 19-34»], the home network selecting from the stored plurality of subscriber profiles a selected subscriber profile which indicates a level of access that is authorized for the given subscriber [*Bharatia*, 0112: disclosing selecting a user profile & *Chow*, column 8 «lines 5-43»: disclosing selecting a particular profile from a plurality of profiles]; and

sending from the home network to the visited network the selected subscriber profile [*Bharatia*, 0112, 0115: disclosing requesting and receiving a subscriber profile].

As noted in the foregoing mapping, *Bharatia* does not expressly disclose:

1. sending an identification of a type of access network at which the subscriber is registering; and
2. that one subscriber may have multiple profiles in the home network.

However, both features were well known in the art at the time of Applicant's invention as evidenced by *Chow* and *Salmela*.

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A. *Salmela* discloses a mobile terminal sending a mode update which identifies the type of access network at which the subscriber is registering.

Salmela discloses a multi-mode user terminal that can access different types of networks [column 2 «lines 9-18»]. *Salmela* discloses that when the user terminal registers itself in a GSM network, the terminal sends a mode update in the form of a location update where the mode update identifies the current mode of the terminal (e.g., GSM). This mode also identifies the network to which the terminal is registering (e.g., a GSM network).

Bharatia also discloses sending a location update during a roaming registration process [0015]. It would have been obvious to one of ordinary skill in the art to have modified *Bharatia*'s location update to include the "mode update" information described above in *Salmela*. Such a modification to *Bharatia*'s location update is an example of combining prior art elements according to known methods to yield predictable results. *See* MPEP § 2143.

B. *Chow* discloses establishing multiple profiles that specify different types of access to services.

Like *Bharatia*, *Chow* is directed to an invention for providing access to services to a subscriber in a visited network. *Chow* further discloses that a subscriber may establish multiple profiles that specify different types of access to services based on, for example, the user's location.

It would have been obvious to one of ordinary skill in the art to have modified *Bharatia*'s invention to include multiple profiles for a single subscriber as taught in *Chow*. Such a modification would improve *Bharatia*'s system because it would allow a subscriber to establish appropriate profiles for different situations that the subscriber is in.

Claim 92 is rejected for at least the same reasons set forth for claim 90.

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Claim 96

Bharatia as modified by *Chow* and *Salmela* discloses the authorized level of access authorizes specific connection supplementary services [*Chow*, column 8 «lines 23-43»].

See the rejection of claim 90 for reasons to combine *Bharatia* and *Chow*.

Claim 12

Bharatia as modified by *Chow* and *Salmela* discloses wherein each different level of access in the different subscriber profiles of the plurality of subscriber profiles provides different connection supplementary services [*Chow*, column 8 «lines 5-43»].

Claims 91 and 93

Bharatia as modified by *Chow* and *Salmela* discloses the method according to claim 90 and network of claim 92, in which the received requested level or type of access to be provided by the visited network to the given subscriber comprises an access type indicator which identifies a type of access network at which the subscriber is registered [*Salmela*, column 3 «lines 19-34»: where the mode update message indicates the GSM network].

H. Claims 10 and 94 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Bharatia*, *Salmela*, and *Chow* in further view of *Lupien*.

Claims 10 and 94

Bharatia as modified by *Salmela*, *Chow*, and *Lupien* discloses each different level of access in the different subscriber profiles of the plurality of subscriber profiles provides a different degree of bandwidth in communications [*Lupien*, column 14 «lines 25-35»: disclosing incorporating bandwidth information for a subscriber's profile | column 11 «lines 21-40»].

It would have been obvious to one of ordinary skill in the art to have modified *Pepe* and *Chow*'s service profiles to include degree of bandwidth information as described in *Lupien*.

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Modification of a service profile to include additional information concerning the services provided to a subscriber is not a novel step because such a modification is an example of combining prior art elements (*Chow*'s service profile and *Lupien*'s service profile comprising bandwidth information) according to known methods to yield predictable results. See MPEP § 2143.

I. Claims 11 and 95 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Bharatia*, *Salmela*, and *Chow* in further view of *Rai*.

Bharatia as modified by *Salmela*, *Chow*, and *Rai* each different level of access in the different subscriber profiles of the plurality of subscriber profiles provides for a different degree of security in communications [*Rai*, column 19 «lines 54-60»: disclosing the profile comprises parameters that help authenticate the end system (i.e., security information) | column 24 «lines 13-25»: disclosing each subscriber is defined a security context which authorizes a degree of security (e.g., type of encryption) for communications].

It would have been obvious to one of ordinary skill in the art to have modified *Bharatia*'s mobile service provisioning system to include *Rai*'s security contexts. Such a modification would improve *Bharatia*'s system by allowing subscriber-specific defined security in communications.

III. CONCLUSION

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DOHM CHANKONG whose telephone number is (571)272-3942. The examiner can normally be reached on Monday to Friday [10 am - 6 pm].

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thu Nguyen can be reached on (571)272-6967. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DOHM CHANKONG/
Primary Examiner, Art Unit 2452